

FIG. 1

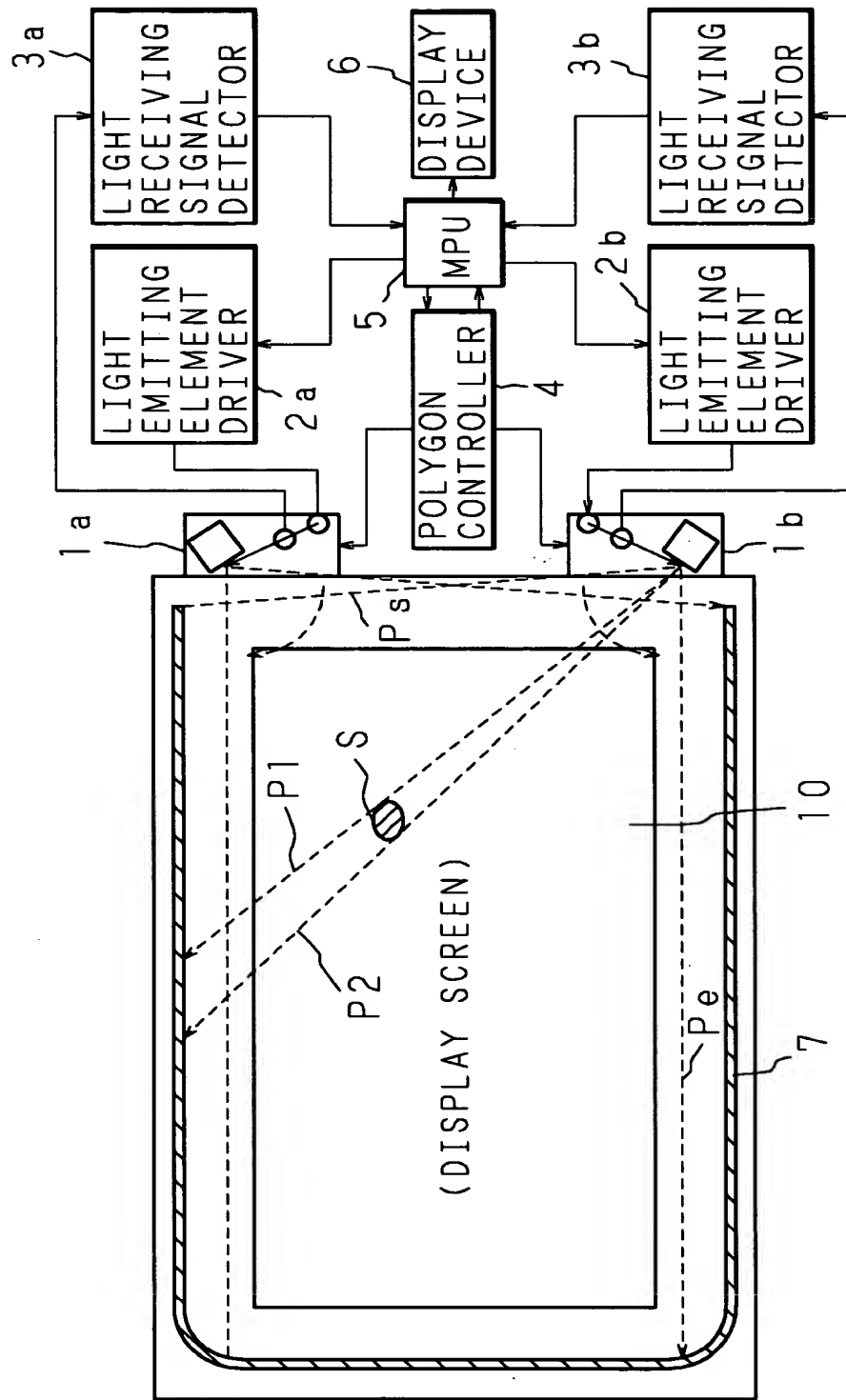


FIG. 2

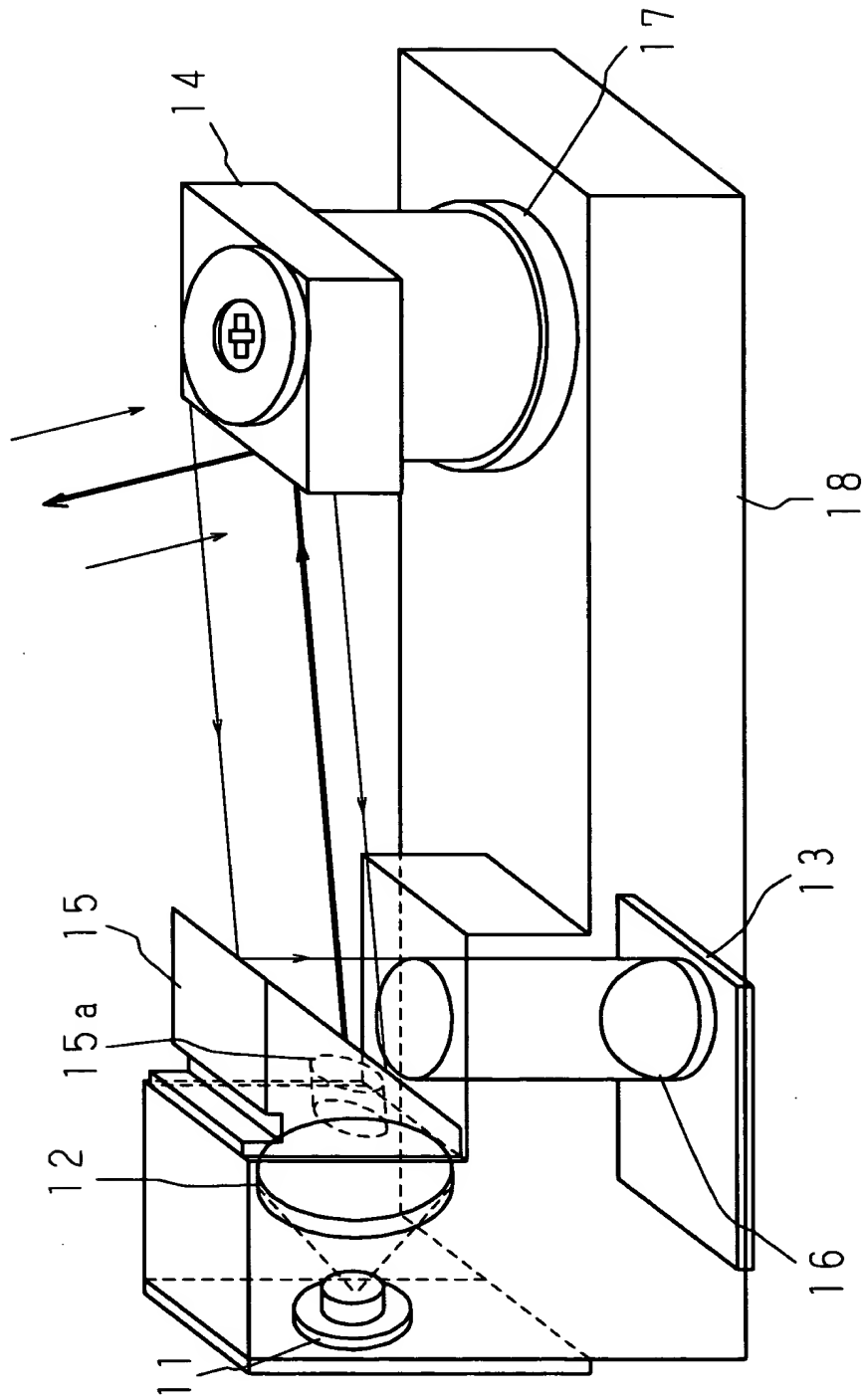
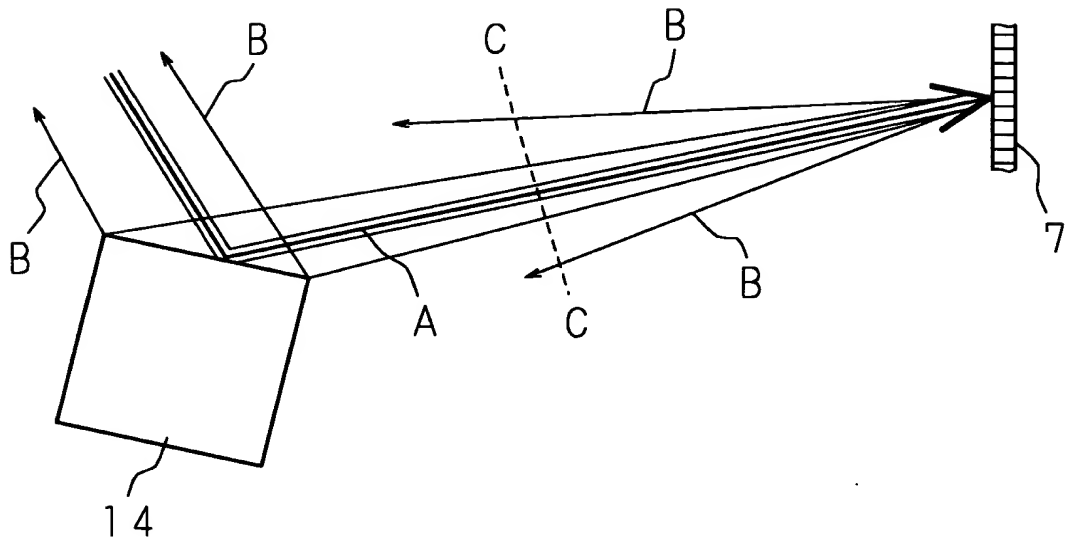


FIG. 3

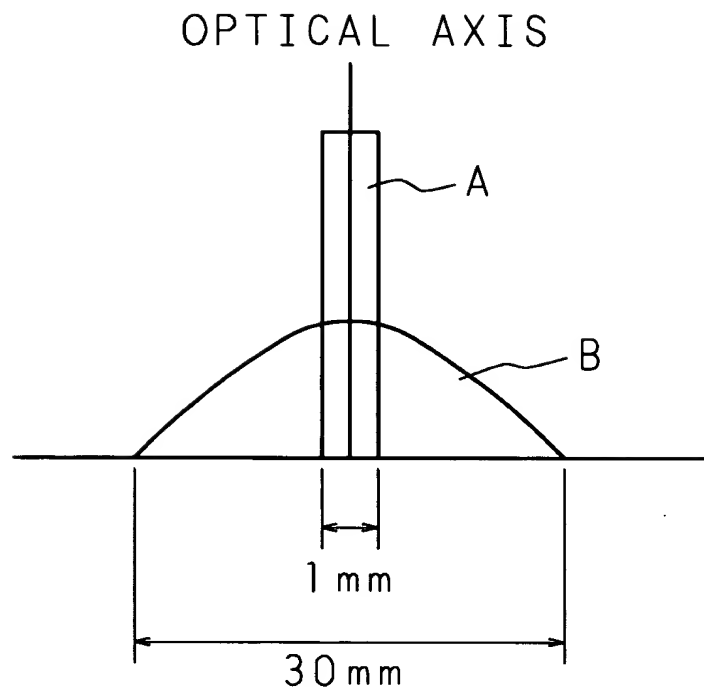


A: SCANNING LIGHT
B: REFLECTED LIGHT

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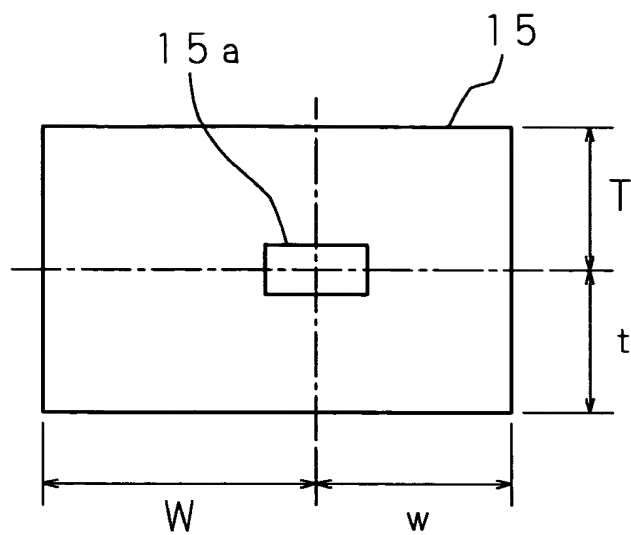
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FIG. 4



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FIG. 5

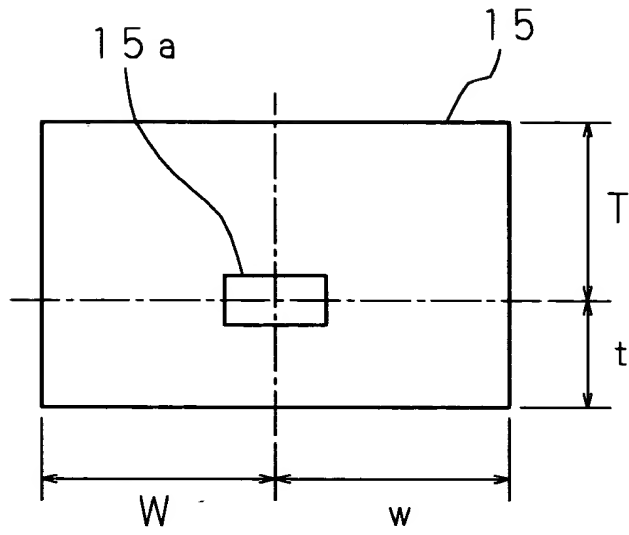


$$W > w$$

$$T = t$$

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FIG. 6

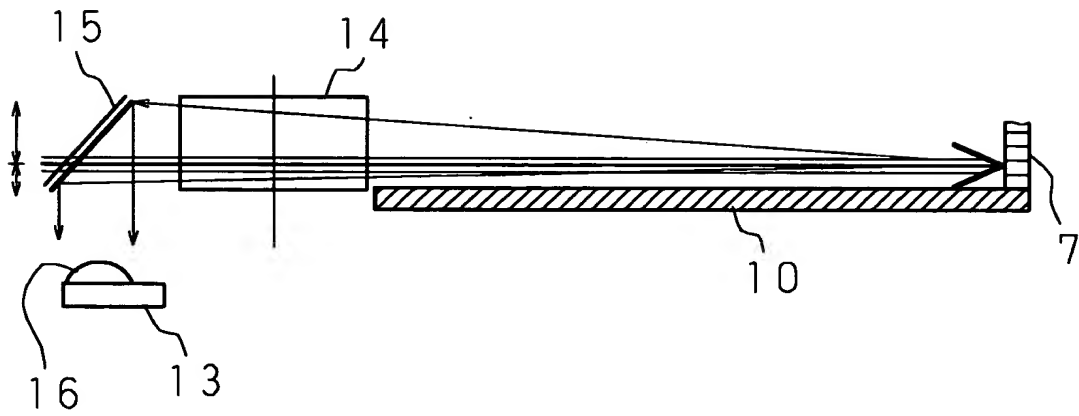


$$W = w$$

$$T > t$$

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FIG. 7



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FIG. 8

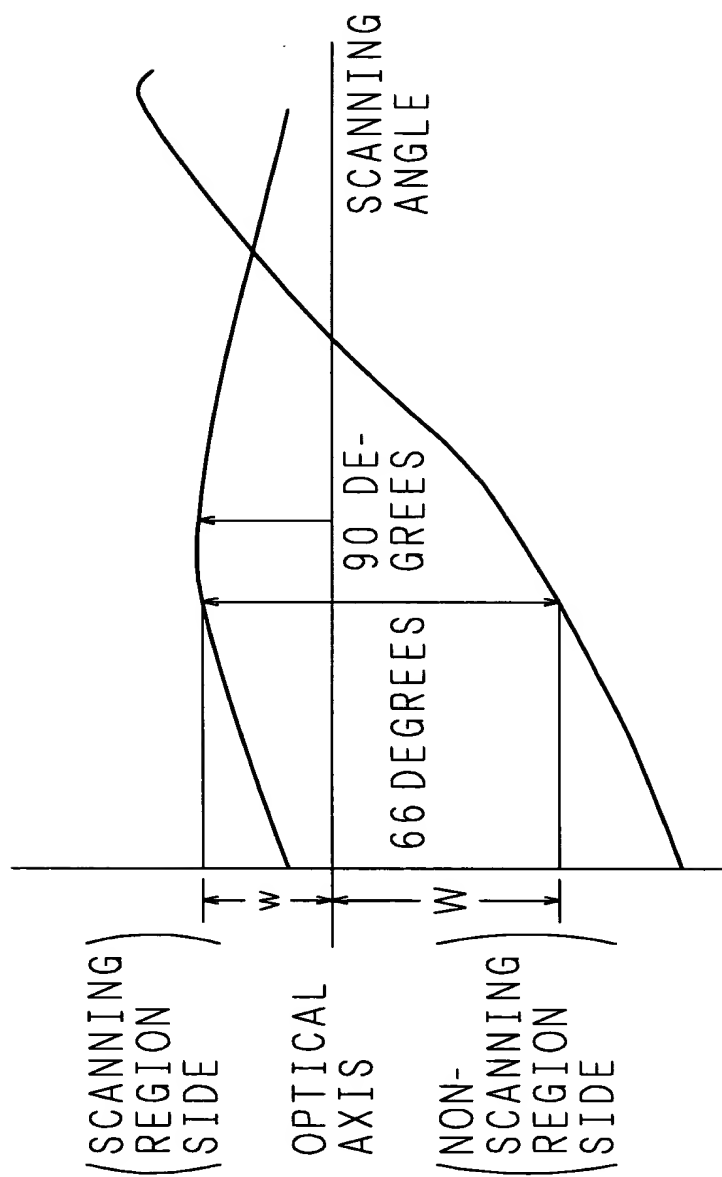
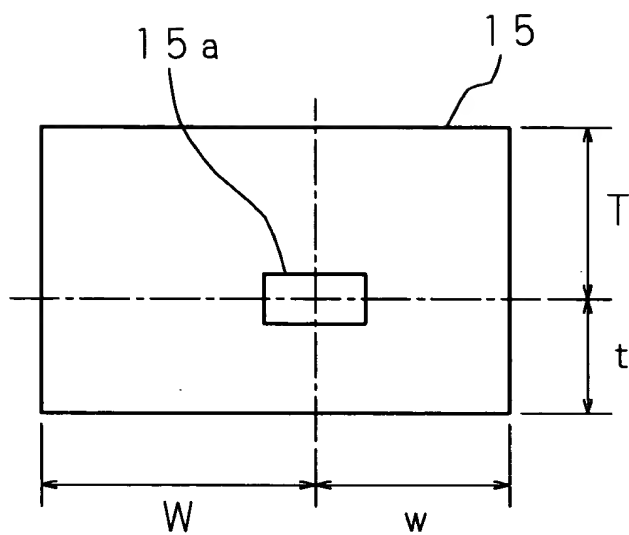


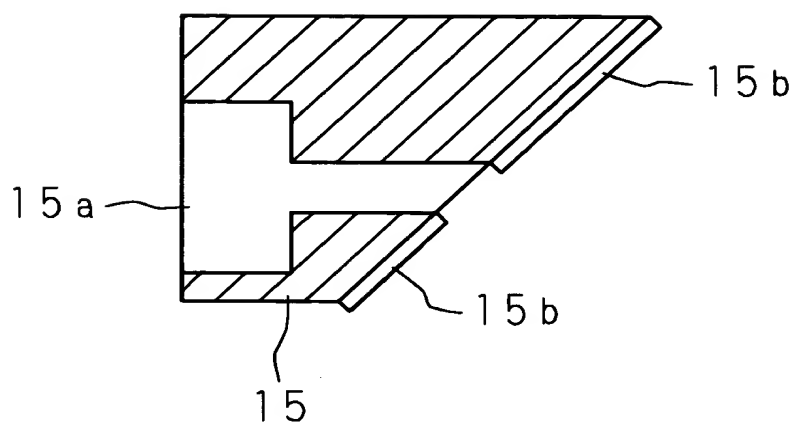
FIG. 9



$$\begin{aligned} W &> w \\ T &> t \end{aligned}$$

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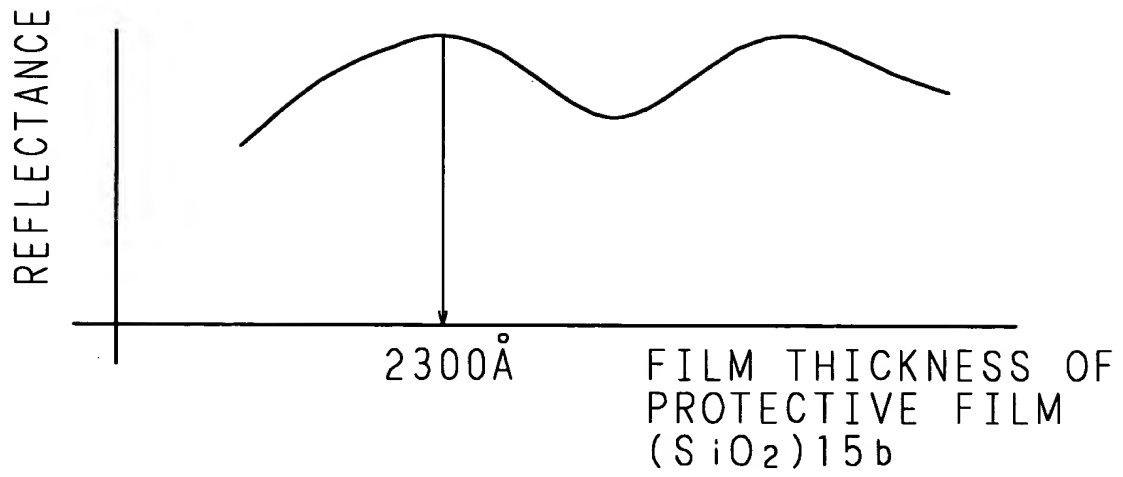
FIG. 10



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FIG. 11



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FIG. 12

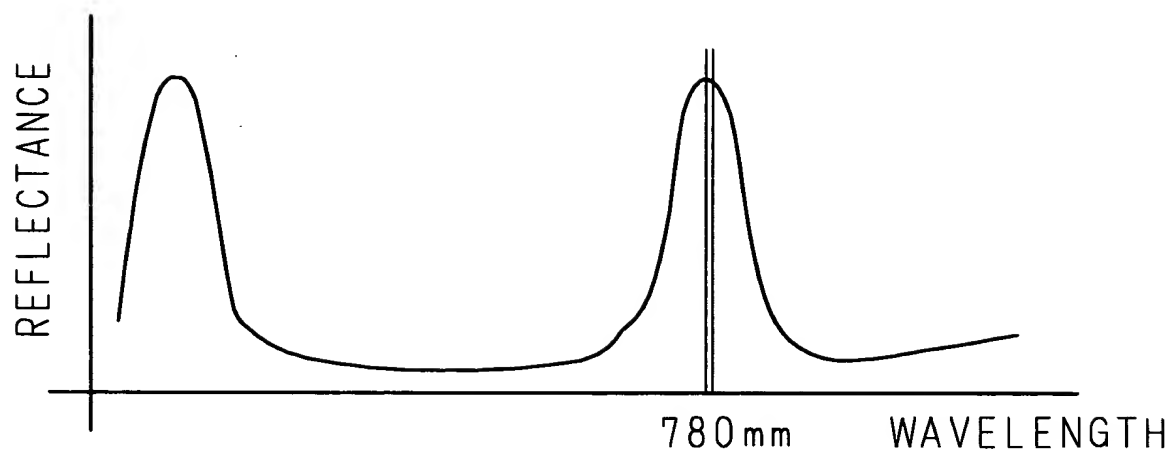


FIG. 13

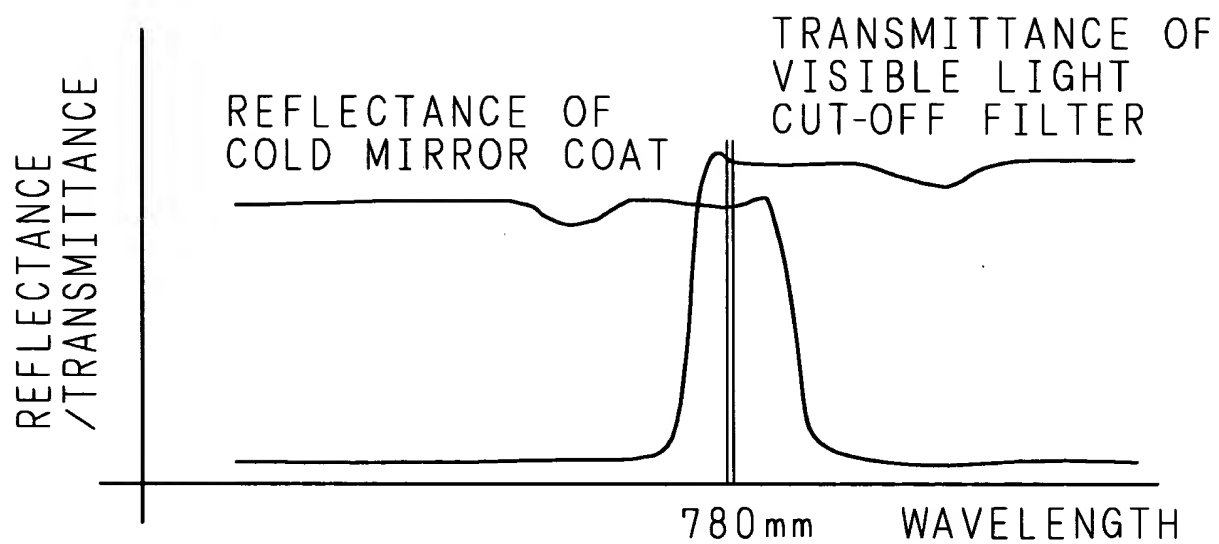
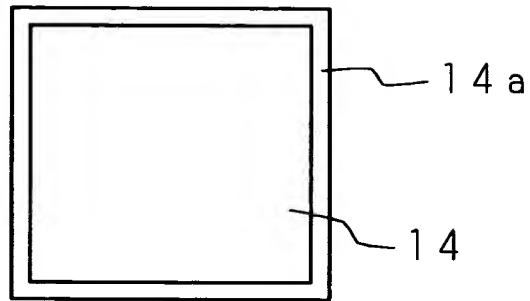
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107090-10057960

FIG. 15



09875084, 060701
T07090, 49057860

FIG. 16

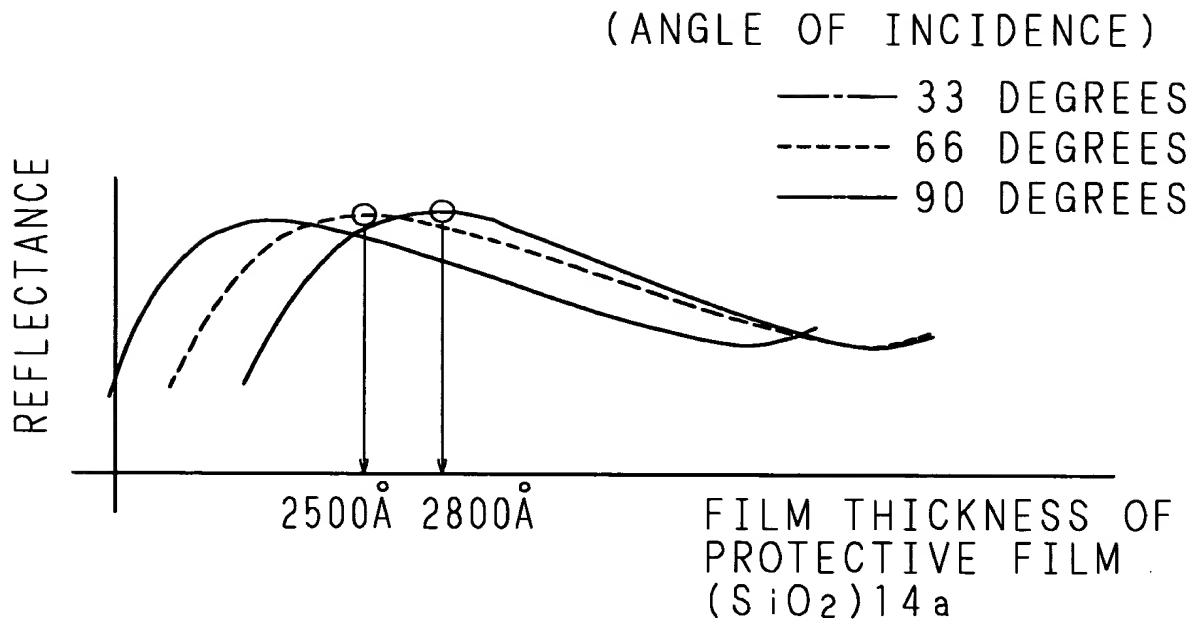
09875084.060701
107090.48057850

FIG. 17

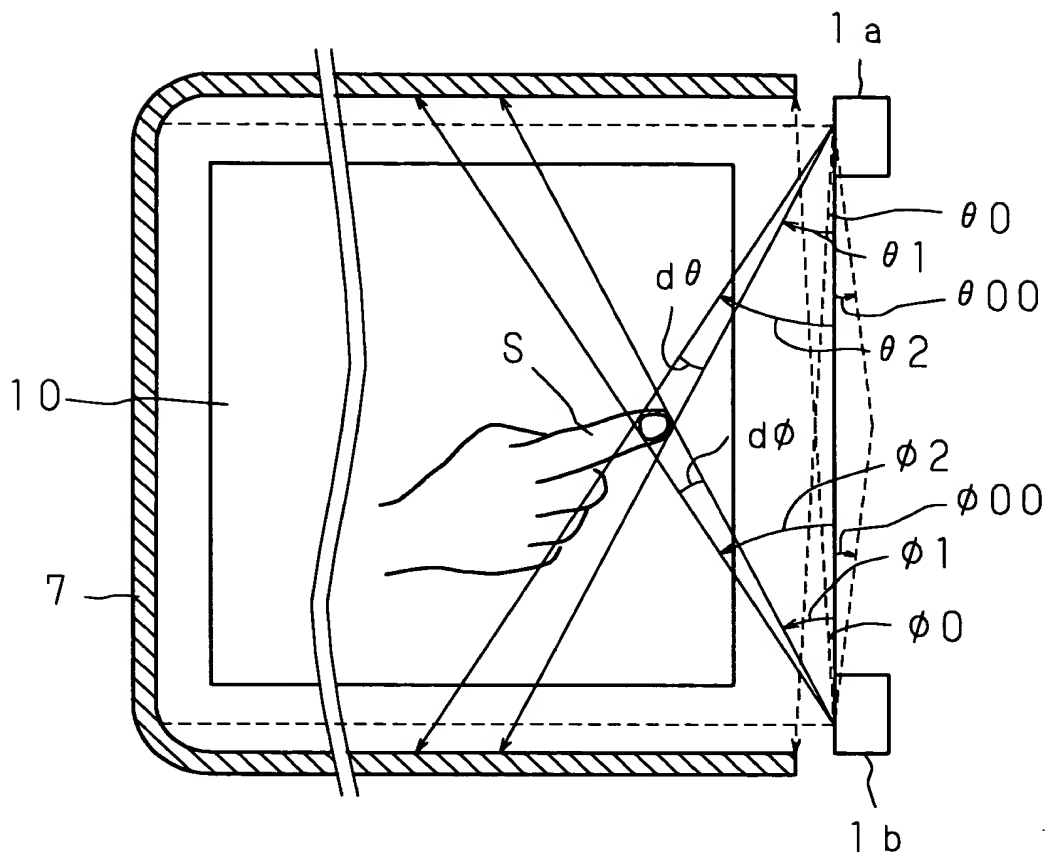
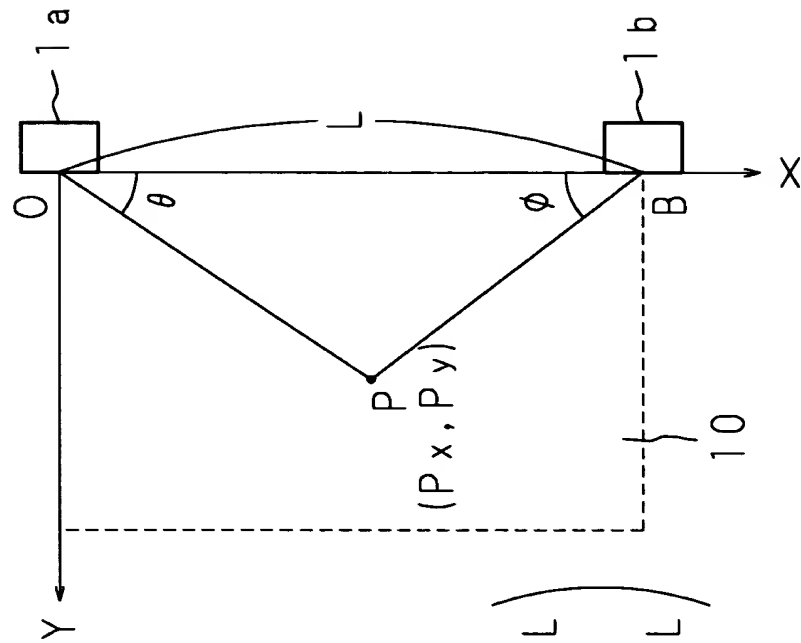
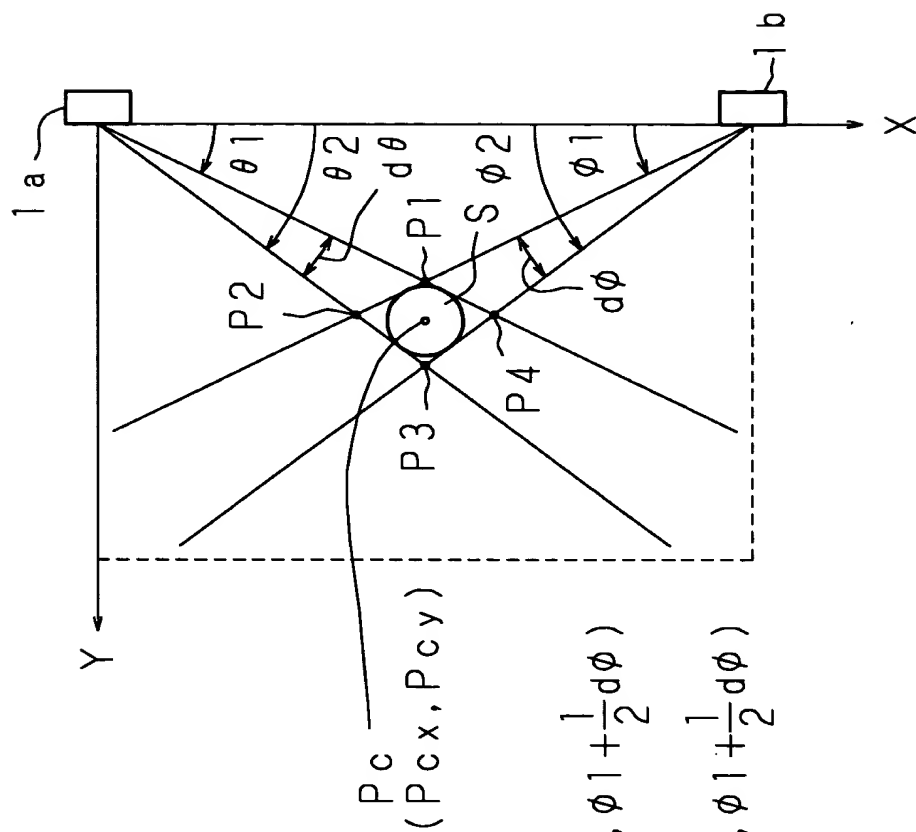


FIG. 18



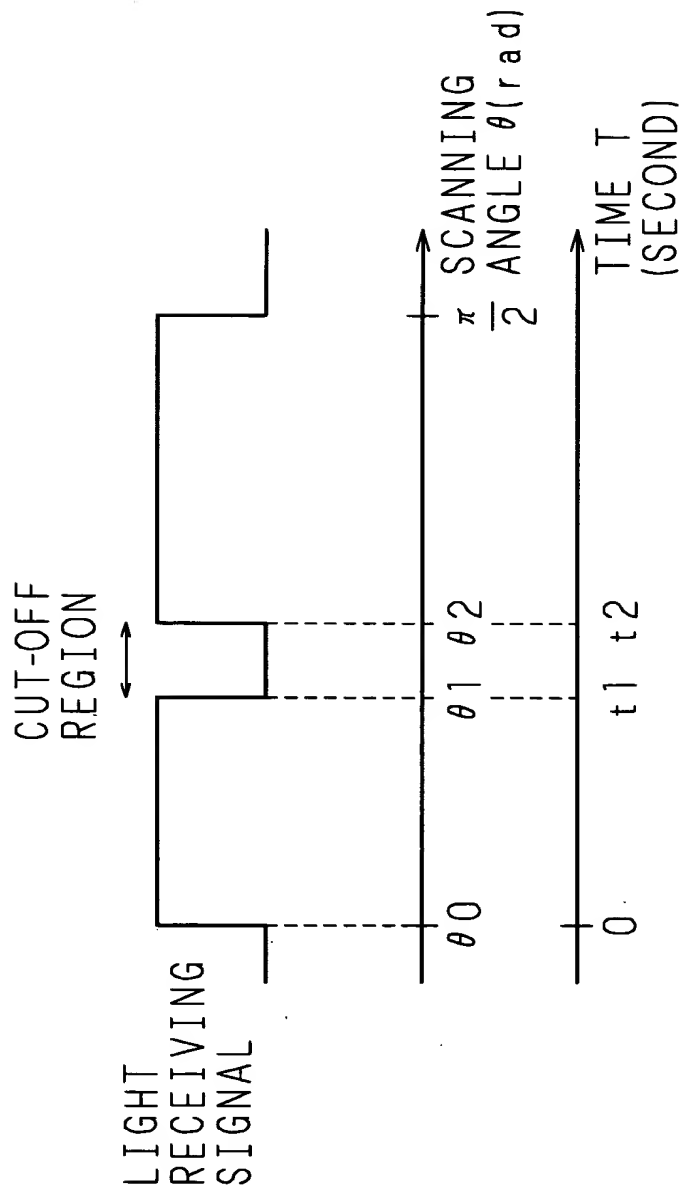
$$\begin{pmatrix} P_x(\theta, \phi) \\ P_y(\theta, \phi) \end{pmatrix} = \begin{pmatrix} \frac{\tan \phi}{\tan \theta + \tan \phi} L \\ \frac{\tan \theta \tan \phi}{\tan \theta + \tan \phi} L \end{pmatrix}$$

FIG. 19



$$\begin{pmatrix} P_{cx}(\theta, \phi) = P_{cx}(\theta 1 + \frac{1}{2}d\theta, \phi 1 + \frac{1}{2}d\phi) \\ P_{cy}(\theta, \phi) = P_{cy}(\theta 1 + \frac{1}{2}d\theta, \phi 1 + \frac{1}{2}d\phi) \end{pmatrix}$$

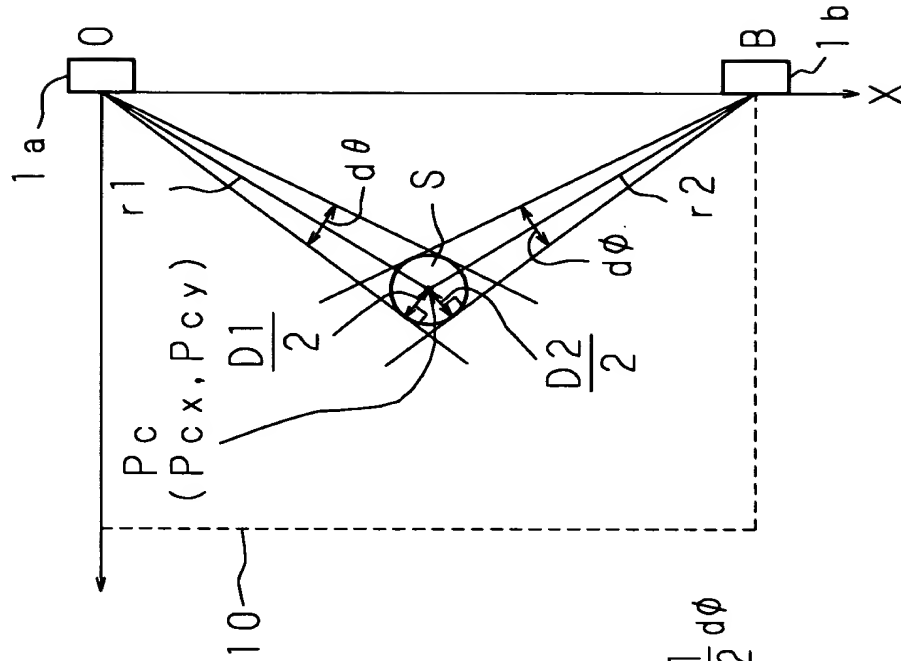
FIG. 20



$$\theta = \omega t$$

$$\left(\begin{array}{l} \theta_1 = \omega t_1 \\ \theta_2 = \omega t_2 \end{array} \right)$$

FIG. 21



D1, D2: DIAMETER OF CROSS
SECTION OF INDICATOR

$$\begin{aligned} OP_c &= r1 = \sqrt{P_{cx}^2 + P_{cy}^2} \\ BP_c &= r2 = \sqrt{(L - P_{cx})^2 + P_{cy}^2} \end{aligned}$$

$$\begin{aligned} D1 &= 2 \cdot r1 \cdot \sin \frac{1}{2} d\theta = 2 \sqrt{P_{cx}^2 + P_{cy}^2} \cdot \sin \frac{1}{2} d\theta \\ D2 &= 2 \cdot r2 \cdot \sin \frac{1}{2} d\phi = 2 \sqrt{(L - P_{cx})^2 + P_{cy}^2} \cdot \sin \frac{1}{2} d\phi \end{aligned}$$